

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

PARK et al.

Application No.: Unassigned

Filed: April 12, 2001

For: APPARATUS AND  
METHOD FOR DIGITAL  
MULTIPLICATION  
USING REDUNDANT  
BINARY ARITHMETIC

Art Unit: Unassigned

Examiner: Unassigned

*Pro*  
*#3/a*  
*S. Collier*  
*2/9/02*

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Prior to the examination of the above-identified patent application, please enter the following amendments and consider the following remarks.

IN THE SPECIFICATION:

Replace the paragraph beginning at page 1, line 16 with:

In a multiplication arithmetic algorithm used in conventional multipliers, partial products are obtained using a modified booth's algorithm (MBA) and are added by a carry-save adder having a structure such as a Wallace-tree, to thereby obtain a final multiplication result. This multiplication is usually achieved using normal binary arithmetic. Here, the partial products can be summed using a redundant binary arithmetic technique instead of normal binary arithmetic technique. The characteristic of redundant binary arithmetic is that there is no continuous propagation of carry as required by general arithmetic for summing partial products.